June 14, 2002

Information Technology

Certification of the Reserve
Component Automation System
(D-2002-103)

Department of Defense
Office of the Inspector General

Quality   *Integrity*   *Accountability*

Report Documentation Page

Report Date	Report Type	Dates Covered (from... to)
14 Jun 2002	N/A	-

Title and Subtitle	Contract Number
Information Technology: Certification of the Reserve Component Automation System	Grant Number
	Program Element Number

Author(s)	Project Number
	Task Number
	Work Unit Number

Performing Organization Name(s) and Address(es)	Performing Organization Report Number
OAIG-AUD (ATTN: AFTS Audit Suggestions) Inspector General Department of Defense 400 Army Navy Drive (Room 801) Washington, DC 22202-2884	D-2002-103

Sponsoring/Monitoring Agency Name(s) and Address(es)	Sponsor/Monitor's Acronym(s)
	Sponsor/Monitor's Report Number(s)

Distribution/Availability Statement
Approved for public release, distribution unlimited

Supplementary Notes

Abstract

Subject Terms

Report Classification	Classification of this page
unclassified	unclassified

Classification of Abstract	Limitation of Abstract
unclassified	UU

Number of Pages
60

Acronyms

ASD(C^3I)	Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
CIO	Chief Information Officer
CCA	Clinger-Cohen Act
IPT	Integrated Product Team
IT	Information Technology
PA&E	Program Analysis and Evaluation
PMO	Program Management Office
RCAS	Reserve Component Automation System

June 14, 2002

MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (COMMAND,
CONTROL, COMMUNICATIONS, AND INTELLIGENCE)
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Certification of the Reserve Component Automation System
(Report No. D-2002-103)

We are providing this final report for review and comment. We considered
management comments on a draft of this report when preparing the final report.

DoD Directive 7650.3 requires that all recommendations be resolved promptly. As
a result of management comments, we revised Recommendation 3. to clarify our intent.
We request that the Army provide additional comments on Recommendations 2. and 3.
and provide comments on Recommendation 5. We request that the Army provide
comments by July 15, 2002.

If possible, please provide management comments in electronic format (Adobe
Acrobat file only) to the e-mail addresses cited in the last paragraph of this memorandum.
Copies of the management comments must contain the actual signature of the authorizing
official. We cannot accept the / signed / symbol in place of the actual signature. If you
arrange to send classified comments electronically, they must be sent over the Secret
Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the audit staff. Questions on this report
should be directed to Ms. Wanda A. Scott at (703) 604-9049 (DSN 664-9049)
(wahopkins@dodig.osd.mil) or Mr. Jim Hutchinson at (703) 604-9060 (DSN 664-9060)
(jhutchinson@dodig.osd.mil). See Appendix C for the report distribution. The audit team
members are listed inside the back cover.

David K. Steensma
Acting Assistant Inspector General
for Auditing

Report No. D-2002-103 June 14, 2002
    (Project No. D2000AS-0212.001)

Certification of the Reserve Component Automation System

Executive Summary

Who Should Read This Report and Why? Managers who plan, develop, or oversee DoD automated information systems will be interested in this report.

Background. This report is the second in a series evaluating certifications that DoD automated information systems were being developed in accordance with the Clinger-Cohen Act. During FYs 2000 and 2001, Congress required that the Chief Information Officer, DoD, before approving acquisition Milestones I, II, or III of high-cost information systems, evaluate the actions taken related to specific requirements of the Clinger-Cohen Act. To help ensure effective oversight of DoD information technology investments, Congress included Section 8121(b) in the DoD Appropriations Act for FY 2000, which also required the Chief Information Officer, DoD, to inform Congress of the certifications and to provide confirmation that DoD Components took steps to meet specific requirements of the Act. The Reserve Component Automation System has estimated life cycle costs of $2.4 billion for FYs 1996 through 2007.

Results. The Chief Information Officer, DoD, did not report to Congress that development of the Reserve Component Automation System did not fully comply with the intent of the Clinger-Cohen Act. The limitations directly affected three of the five interest items that were specified in Section 8121(b)(2): business process reengineering, analysis of alternatives, and performance measures. The Chief Information Officer did not believe the weaknesses for business process reengineering and analysis of alternatives were significant enough to withhold congressional certification and no weaknesses were identified for functional performance measures even though none were specifically developed. Disclosure of compliance limitations would have provided Congress with a more accurate measure of the progress and results that respective information technology investments made in complying with the Clinger-Cohen Act. To meet the full intent of the Clinger-Cohen Act, the application of business process reengineering and analysis of alternatives principles should be used before initiating development of any future RCAS increment and functional performance measures should be formally established. Additionally, the risks associated with exchanging unencrypted data files should be reevaluated. Further, out-year funding for the system should be identified and related congressional reporting requirements met. See the finding for the detailed recommendations.

Management Comments and Audit Response. The Chief Information Officer, DoD, generally concurred with the audit results and stated that he would develop criteria to enable uniform assessments and reporting in conjunction with the Chief Information Officers of the DoD Components. The Army partially concurred with the recommendations on reviewing future system increments, establishing functional performance measures, evaluating the risks associated with the exchange of unencrypted data files, and identifying out-year funding for the Reserve Component Automation System. Army comments on the recommendations to review future system

increments and functional performance measures were not clear; therefore, we ask for additional comments. We also request the Army to respond to the recommendation concerning congressional reporting. We request the Army to provide comments on the final report by July 15, 2002. See the Finding section of the report for a discussion of management comments. The complete text of management comments is in the Management Comments section.

Table of Contents

Background

In the mid-1990s, Congress passed several items of legislation intended to improve the management and performance of Federal agencies. The reform legislation responded to the inability of Federal agencies to effectively manage the development and production of information technology (IT) systems to meet the needs of functional users. One major reform initiative was the Information Technology Management Reform Act of 1996, which was subsequently retitled the Clinger-Cohen Act of 1996 (CCA). To help ensure appropriate management practices in developing systems, Congress included section 8121(b) in the DoD Appropriations Act, FY 2000. Section 8121(b) required the Chief Information Officer (CIO), DoD, to certify, prior to approval of key acquisition review points (milestones), that the system was being developed in accordance with the CCA. Additionally, the CIO, DoD, was required to notify Congress of system certifications and confirm the performance of specific "interest items" related to CCA tenets. Appendix B provides a summary of the CCA and the specific section 8121(b) requirements.

DoD Guidance. The specific interest items iterated in section 8121(b) were specifically recognized and required by DoD policy and guidance before the enactment of CCA in 1996. DoD Directive 8000.1, "Defense Information Management Program," October 27, 1992, established policy and responsibilities for business process streamlining and improvements; preparing and validating functional economic analyses, which include analyses of alternatives and investment risk; developing functional process performance measures and assessments; and ensuring appropriate information security. In addition, DoD Directive 8120.1, "Life-Cycle Management (LCM) of Automated Information Systems (AISs) ," January 14, 1993, [1] emphasized the importance of those specific section 8121(b)(2) interest items that are critical in the "early-on" IT development stages, especially those related to improving business processes and examining alternatives and projecting related costs and benefits.

Acquisition Program Milestones. A milestone is a decision point that separates the major phases of an acquisition program. DoD acquisition policy requires a milestone decision before an acquisition program may progress to the next acquisition phase. The Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD(C^{3}I)), as the Milestone Decision Authority for major automated information systems approves milestone decisions for high-cost or special interest IT acquisition programs.

Prior to October 2000, the major milestone phases included Concept Exploration (Phase 0), Program Definition and Risk Reduction (Phase I), Engineering and Manufacturing Development (Phase II), and Production, Fielding/Deployment, and Operational Support (Phase III). In October 2000, DoD substantially revised its acquisition guidance and requirements to reduce

---

[1]DoD Directive 5000.1, "Defense Acquisition," March 15, 1996, canceled DoD Directive 8120.1 and incorporated the policies and requirements on life-cycle management for automated information systems.

the number of major milestone phases and their associated decision points. DoD also revised acquisition regulations to clearly and effectively implement various aspects of IT reform legislation, including the CCA. Because the Reserve Component Automation System (RCAS) was already in Milestone III before the October 2000 change, the CIO continued to use the existing system of milestone designations for the project.

Reserve Component Automation System. In 1986, the RCAS was established to provide the Army National Guard and the Army Reserve with a single, extensive, modern automated information system designed to support commanders, staffs, and functional managers in the administration and mobilization of the Army Reserve Component. The mission and vision of the RCAS are to support daily operations, training, and administrative tasks for all Guard and Reserve echelons and to provide timely and more accurate information to plan and support mobilization. When it is fully deployed, the RCAS will link more than 10,500 Guard and Reserve units at more than 4000 sites located in all 50 states, the District of Columbia, Guam, Puerto Rico, the Virgin Islands, Europe, and the Pacific Rim.

In FY 1995, the Army restructured the RCAS project to constrain cost growth and leverage new information technology. The restructured RCAS project consisted of commercial off-the-shelf hardware and office automation software, government off-the-shelf software[2], and newly developed software applications that were integrated into a personal computer-based architecture.

RCAS Increments. The 1995 project restructure also revised the RCAS acquisition strategy to provide an incremental, evolutionary acquisition approach that included development and deployment of capabilities for seven increments. Early project increments provided the necessary infrastructure. Increment 1, approved in September 1996 (Milestone IIIa), provided commercial-off-the-shelf office automation software, classified-capable and unclassified workstations, and wide area network interconnectivity. Increment 2, approved in January 1998 (Milestone IIIb), introduced data servers and logistics functional software. Later increments focused on software development to better support several functional areas. Increment 3, approved May 2000 (Milestone IIIc), provided force authorization, security, and training functions. Increment 4/5[3], approved in July 2001 (Milestone IIId), introduced mobilization planning and occupational health management and added additional force authorization and modernization, human resources, and training management functionality. Increment 6, scheduled for certification for compliance with the requirements of the Clinger-Cohen Act during FY 2002 (Milestone IIIe), will introduce mobilization planning and occupational health management functions. Future increments will implement user requirements in the order of priority established by the Requirements Control Board for the Reserve Components. RCAS was

---

[2]Software previously developed to military or Federal specification or description and stocked by a distributor, before receiving orders or contracts for its sale.

[3]Increments 4 and 5 were combined into a single increment.

scheduled to be fully deployed and transitioned to a separate organization within the Reserve Component for life-cycle support by March 2003.

The estimated life-cycle costs of the RCAS project for Increments 1 through 7 for FYs 1996 through 2007 totaled $2.4 billion. Beyond FY 2002, all costs will be user costs with the exception of activities required during the program transition period from the RCAS Project Management Office (PMO) and the contractor to the users and the RCAS software maintainer. The projected return on investment[4] for RCAS Increment 3, as approved in May 2000, was 4.5 to 1 and the projected return on investment for the entire RCAS project was 5 to 1.

The ASD(C^3I), as the CIO, DoD, certified on March 28, 2000, and on July 3, 2001[5], respectively, that Increment 3 and Increments 4/5 of the Reserve Component Automation System had been developed in accordance with the requirements of the Clinger-Cohen Act.

Objectives

The audit objective was to determine whether DoD oversight processes and procedures provided the CIO, DoD, with a sufficient basis to certify that the RCAS was being managed and developed in accordance with the CCA. This report is the second of a series. In a subsequent report, we will assess DoD progress in implementing the CCA and review related management controls. A description of the audit scope and methodology and prior coverage related to the RCAS project is shown in Appendix A.

---

[4]Return on investment is the ratio of the present value of benefits to the present value of costs.

[5]Section 8121(b) required CIO, DoD, certification during FY 2000. The certification requirement was extended through FY 2001 by Section 8102(b) of the DoD Appropriations Act, FY 2001.

Certification of the Reserve Component Automation System As Compliant with the Clinger-Cohen Act

Limitations of the RCAS project efforts for Increments 3 and 4/5[6] for compliance with the intent of the CCA were not reported by the CIO, DoD. The limitations directly affected three of the five interest items that were specified in Section 8121(b)(2). This condition occurred because the CIO did not believe that the weaknesses associated with business process reengineering and the analysis of alternatives were significant enough to withhold the CCA certification. In addition, the CIO did not identify any weakness in performance measures even though the RCAS PMO and the Reserve Components had not established functional performance measures. Accordingly, Congress was not informed that the RCAS was not being developed in full compliance with CCA requirements.

RCAS Certification Process

The RCAS project was the first major automated information system in DoD that was subject to the Section 8121(b) certification process. The RCAS was also used to develop a template and a certification procedural process for follow-on projects. The PMO prepared a compliance report for the RCAS project, which summarized the requirements of Section 8121(b), provided background information on the RCAS project, and outlined the actions taken by project officials on the five interest items in Section 8121(b)(2): business process reengineering, analysis of alternatives, economic analysis, performance measures, and information assurance strategy. A review team,[7] represented by various staff offices within the OSD, then prepared the congressional certification report for signature, stating that RCAS Increment 3 was being developed in accordance with the CCA. The compliance report and the CIO certification report contained essentially the same information.

On February 25, 2000, the review team briefed the CIO on the RCAS draft certification report for Congress. The briefing included confirmation of steps taken by the PMO to address each of the five specific congressional interest items.

During its briefing to the CIO, the review team presented a qualified statement for actions regarding business processing reengineering and the analysis of

---

[6]Increments 4 and 5 were combined into a single increment.

[7]The review team consisted of action officers from the Office of the Secretary of Defense (Command, Control, Communications, and Intelligence); Director, Program Analysis and Evaluation; Director, Operational Test and Evaluation; and Joint Staff, Director for Command, Control, Communications and Computers (J-6).

alternatives because business process work flows had not been substantially redesigned. Additionally, the PMO had not considered a full range of approaches for the analysis of alternatives to reduce costs, outsourcing services, streamline operations, or privatize functions.

Despite those weaknesses, the review team recommended that the CIO certify RCAS Increment 3 as CCA compliant. According to the review team, the certification report could not qualify or restrict the level of steps taken by the PMO for business process reengineering and analysis of alternatives; a "qualified" or restricted certification was not an option because a project either did or did not meet the CCA certification requirements. The CIO tentatively approved the certification during the briefing, thus authorizing the preparation of the official certification report and congressional notification letters for submission to Congress.

The CIO coordinated the certification report and notification letters with, and obtained endorsement by the Office of the Under Secretary of Defense (Comptroller); the Office of the Assistant Secretary of Defense for Legislative Affairs; the Office of the Deputy Under Secretary of Defense for Program Integration; the Department of the Army, Office of the Director of Information Systems for Command, Control, Communications, and Computers; the Office of the Director, Program Analysis and Evaluation (PA&E); the Office of General Counsel; the National Guard Bureau, Program Executive Office for Information Systems; and the Chairman of the RCAS General Officer Steering Committee. The CIO submitted the certification report to Congress on March 28, 2000.

We focused on the certification of Increment 3. However, because the CIO certified and submitted the certification report on RCAS Increments 4/5 to Congress on July 3, 2001, while the audit was still in progress, we performed a limited review of the certification report on Increments 4/5. We determined that, similar to the certification report for Increment 3, the CIO did not report any limitations of the RCAS project efforts for compliance with the intent of CCA. Unlike Increment 3, the OSD review team did not provide a formal documented briefing on its conclusions regarding certification of Increments 4/5 (Milestone IIId) to the CIO. According to the staff in the Office of the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) (ASD[C^3I]) staff, Milestone IIId represented a recertification of the project's compliance with the CCA requirements and that, with the exception of determining that operations and support for RCAS were insufficiently funded, and updating the tables and exhibits in the certification report, no major changes or issues occurred after the OSD review team's assessment of Increment 3. Because the CIO certified Increment 4/5 based on similar efforts performed by the RCAS PMO and assessments made by the OSD review team on Increment 3, we concluded that the concerns presented in the report were also applicable to Increment 4/5.

Because the RCAS was the first system certified as being developed in accordance with the CCA, we believe that the CIO should have established that two classes of information systems are subject to the requirements of the CCA within DoD. Specifically, systems that started development or were in an early phase of development after the enactment of the CCA in 1996 should fully

comply with the CCA. However, systems such as RCAS, which were in an advanced stage of development and deployment when the CCA was enacted, most likely would not fully meet the tenets of the CCA because the opportunities to realize the most substantial benefits from "up front" efforts such as business process reengineering or analysis of alternatives were reduced by that time.

Business Process Reengineering

Confirmation of Business Process Reengineering Certification. Although representatives from the offices of the ASD(C³I) and the Director, PA&E, acknowledged that DoD and the Army had not focused on the use of activity-based costing techniques to simplify or otherwise redesign business processes before investing in RCAS, the certification report to Congress did not clearly explain that RCAS business process reengineering efforts did not completely meet the full intent of the CCA.

RCAS Business Process Reengineering Efforts. Although the RCAS investment should improve and support work processes to reduce cost, improve effectiveness, and implement Government and commercial off-the-shelf technology, the work processes of the Reserve Components were not fully subjected to business process reengineering.

The General Accounting Office, "Business Process Reengineering Assessment Guide," May 1997, states that a business process can be decomposed into specific activities, measured, modeled, and improved; redesigned; or eliminated. Reengineering identifies, analyzes, and redesigns an organization's core business processes to achieve dramatic improvements in critical performance measures. In addition, the guide states that dramatic improvements realized by rethinking how the organization's work should be achieved, distinguishes reengineering from process improvement that focuses on functional or incremental improvement.

Efforts undertaken by the RCAS PMO to justify information technology investments in the system did not identify, dramatically redesign, and eliminate low or no value-added functions or work processes before deciding to invest in RCAS. The RCAS PMO indicated that such efforts were not a top priority in 1989 because the functional users were focused on developing requirements and identifying and documenting pre-automation business processes. According to the PMO, those efforts were not emphasized when OSD reprogrammed the Continental Army Management Information System in 1986 as RCAS or restructured the RCAS project in 1995. The efforts of the RCAS stakeholders and officials related to business process reengineering could, at best, be considered an improvement in the functional process; however, those efforts could not be considered a redesign and reengineering of established business processes or workflows.

We asked the PMO to provide documentation to show that management considered and took advantage of business process reengineering opportunities before making a commitment and commencing the development or acquisition of software applications that would satisfy the functional requirements for each

new RCAS increment. The PMO stated that business process reengineering was a functional community responsibility and did not know whether the Reserve Component functional communities had performed independent business process reengineering analyses for each increment. In essence, the PMO, in conjunction with the functional proponents, had not performed business process reengineering on any of the RCAS increments since the 1996 enactment of the CCA.

Staffs of the ASD(C^{3}I) and PMO also indicated that business process reengineering was not a primary consideration when the Army reprogrammed the Continental Army Management Information System and renamed it as RCAS in 1986 because the significance of the derived advantages of business process reengineering were not widely recognized and emphasized at that time; however, when the Army restructured the RCAS project in FY 1995, DoD policy required DoD Components to consider business process streamlining.

The PMO exerted extensive efforts to overcome the inadequacies of existing methods and procedures by proposing to automate inefficient, functionally disconnected, and manual processes. The PMO estimated that about $3.5 billion (94 percent) of the benefits derived from the RCAS included productivity improvements that would result from automating work processes rather than from the functional reengineering or redesign of those processes. Although automation of work processes would require fewer Reserve Component personnel to perform administrative tasks, there was no expectation to reduce the number of personnel. Instead, the Reserve Components planned to use the extra time to provide additional training for personnel.

Analysis of Alternatives and Economic Analysis

Policy. DoD Instruction 7041.3, "Economic Analysis for Decision Making," November 1995, contains policy for economic analysis and analysis of alternatives. An analysis of alternatives and an economic analysis are directly related; effective use of an analysis of alternatives, in conjunction with an economic analysis, provides a viable basis for evaluating potential solutions and selecting the most cost-effective alternative. The analysis of alternatives generally starts with a broad base of possible solutions to meet a mission need. When the field of possible solutions is narrowed to a few realistic alternatives, the principles of economic analysis and its tools of cost-benefit analysis and return-on-investment are applied to identify the most promising solution.

Analysis of Alternatives. The PA&E office qualified its assessment of the analysis of alternatives in the February 2000 briefing to the CIO because the August 1996 analysis of alternatives did not consider a full range of alternatives to reduce cost, such as outsourcing specific functions or streamlining or privatizing routine administrative processes. Routine administrative processes include personnel activities, payroll, training, and human resources.

According to DoD Instruction 7041.3, each feasible alternative for meeting an objective must be considered and its life-cycle costs and benefits should be evaluated. Alternatives dismissed as "infeasible" must be discussed, but need not be formally compared in the economic analysis.

The PMO stated that the RCAS was exempt from outsourcing routine administrative processes because the system was established under title 10, United States Code of the Armed Services Program and because it supported numerous inherent Government functions, such as manning, equipping, training, and sustaining the Army's Reserve Components.

We acknowledge that the mobilization capability of the RCAS may be an inherent Government function but believe that the routine administrative processes of RCAS are not. The Office of Management and Budget Circular A-76, "Performance of Commercial Activities," August 4, 1983, (Revised 1999) states that an inherent Government function is a function that is so intimately related to the public interest as to mandate performance by Government employees. The PMO did not provide any documentation to show how RCAS was an inherent Government function. Additionally, the PMO did not consider, in the analysis of alternatives, the opportunity to competitively source the day-to-day, repetitive administrative tasks and work processes of the project and did not discuss the infeasibility of that option.

Economic Analysis. We examined the related Milestone III economic analysis, dated August 1996, and identified no major deficiencies based on the requirements of DoD Instruction 7041.3. Also, neither the PMO nor the ASD(C^{3}I) presented any economic analysis issues to the CIO during the RCAS certification briefing. However, we noted that the benefits used in the computation of the return on investment consisted of "soft dollars" or benefits that could not be quantitatively tracked through the budget process. The PA&E office questioned the amount of actual benefits because benefits were primarily based on productivity gains. Because the return on investment was based on increased productivity, the use of performance measures to assess the functional benefits of the RCAS investment becomes even more important.

Performance Measures

Functional proponents of RCAS did not establish a performance measurement plan to assess functional performance or to identify whether the desired results were being achieved after the deployment of RCAS. Specifically, new processes were not compared against measures of outcome, output, and efficiency of RCAS in order to continually monitor performance and make further refinements. In addition, the PMO did not use benchmarks to assess the efficiency of work process improvements.

Functional Performance Measures. According to the PMO, proponents did not establish functional performance measures because those measures were not considered a top priority in 1989 when the functional users focused on identifying and documenting pre-automation business processes and translating the results into requirements for RCAS. In addition, user representatives,

including members of the customer focus team for RCAS, stated that they did not establish functional performance measures. The CCA requires that performance measurements be prescribed for information technology acquired for or used by the executive agency. The performance measurements should indicate how well the information technology supports projects of the executive agency.

Although functional proponents established key performance measures for the system's operational performance, including operational effectiveness and suitability, cost, timeliness, and quality, the measurements, when implemented, did not measure the outcome of the investment in or functional benefits of RCAS. Without functional performance measures, the Army and the Reserve Components would not be able to determine, quantitatively, how well RCAS-improved processes met mission goals, or identified problems in meeting those goals. An example of a functional performance measure may be to show how many soldiers would be relieved of administrative workloads in order to engage in more training because of RCAS automation.

Benchmarks. Although the CIO certification report stated that benchmarks were used to derive risk-adjusted alternative technical solutions during the 1995 project restructure, the PMO did not provide any documentation to support its benchmarking efforts. For benchmarking, the CCA requires that, where comparable processes and organizations in the public or private sectors exist, process performance should be quantitatively benchmarked against such processes in terms of cost, speed, productivity, and quality of outputs and outcomes.

The General Accounting Office, "Business Process Reengineering Assessment Guide," dated May 1997, indicated that benchmarks are instrumental in identifying gaps between an organization's process performance and that of leading organizations and in understanding how those leaders have changed their structures, work processes, and lines of business to improve performance dramatically.

According to the RCAS PMO, no documented evidence was available to show that either the functional users or the PMO used benchmarks for existing work processes with internal or commercial organizations. Unless an organization uses benchmarks to measure its process performance with the goals and performance of leading organizations, it is difficult to establish reference points for setting meaningful improvement goals. Benchmarks, when used in conjunction with performance measurement, present a sound method to establish a credible business case for changing work processes of an organization.

Information Assurance

Although the certification testing of RCAS met the requirements of DoD Instruction 5200.40, "DoD Information Technology Security Certification and

Accreditation Process," December 30, 1997, and the congressional certification requirements for the CCA, the PMO did not use encryption[8] techniques to safeguard sensitive but unclassified data.

In January 1997, at the request of the RCAS Program Executive Office, the Director of Information Systems for Command, Control, Communications, and Computers, who was the Designated Approving Authority for the RCAS, granted a deferment for deploying data encryption hardware devices, pending final determination of a software encryption or common hardware solution. As of January 2002, the deferment was still in effect.

We requested and the PMO provided a listing of 28 current and projected system interfaces. Of the 28 interfaces with other systems, 16 data exchanges used File Transfer Protocol, which is a service that supports file transfers between local and remote computers, including the Internet. No documentation was available to indicate that RCAS encrypted any of its data. The PMO stated that electronic external interfaces were not authenticated[9] or encrypted and that engineering efforts were ongoing with the owners of the data to provide security during electronic transmission. Though the data were unclassified, they may have contained sensitive information, such as personnel data, manpower allocation, and force structure. If the data remain unencrypted, system users may be vulnerable to network attacks or compromise, such as eavesdropping and playback.

The Director of Information Systems for Command, Control, Communications, and Computers and the PMO should review the risks associated with passing unsecured sensitive data and implement encryption technology, such as the Secure Socket Layer, if appropriate, to reduce the risk of inadvertent disclosure of sensitive but unclassified data.

Oversight

Although the CIO, senior DoD officials, and action officers reviewed key project documents, such as the acquisition strategy, the Operations Concept document (the RCAS project's operational requirements document), the Test and Evaluation Master Plan, and the Acquisition Program Baseline, the CIO needs to establish uniform criteria to determine compliance with the CCA. The criteria should include the need for the Overarching and Integrating Integrated Product Teams[10] to improve their involvement in the certification process.

---

[8]Encryption is the transformation of data into a form unreadable by anyone without a secret decryption key and ensures privacy by keeping the information hidden from anyone for whom it was not intended.

[9]Authentication is the process of determining the identity of a user attempting to access a system.

[10]In 1995, the Under Secretary of Defense for Acquisition, Technology, and Logistics and the ASD(C^3I) issued guidance entitled "Rules of the Road, A Guide for Leading Successful Integrated Product Teams" that emphasized the importance and advantages of minutes of meetings, what they should include, and that all members of the IPT should be provided final minutes within 2 working days after the deadline for the receipt of comments.

Additionally, the CIO and senior DoD officials need to make sure that the Army complies with congressional direction regarding the absence of funding for sustainment operations and support for the RCAS project.

CIO, DoD. The CIO, DoD, certified that Increment 3 of the RCAS project was developed in accordance with the CCA, although the basis for the certification was confusing because the CIO had not established universal criteria or a consistent approach to determine the adequacy of compliance with the CCA requirements. The first report in this series, Inspector General, DoD, Report No. D-2001-137, "Certification of the Defense Civilian Personnel Data System," June 7, 2001, recommended that the CIO clarify and enhance the criteria and approach to be used by DoD Components for determining whether major automated information systems are developed in accordance with the CCA. Therefore, this report will not include a recommendation addressing the matter.

Overall, the CIO could improve oversight responsibilities through periodic verification of information provided. Because CIO staff members seldom performed detailed reviews of project documentation, we concluded that prudent verification could substantially improve the effectiveness of oversight responsibilities. This report will not include a recommendation addressing this matter because Inspector General, DoD, Report No. D-2000-137 recommended that the CIO strengthen oversight processes, including the process for certifying that major automated information systems are developed in accordance with the CCA, by periodically confirming the accuracy and adequacy of information reported by DoD Components.

Army CIO. Absent compliance criteria from the CIO, DoD, the Army CIO established a checklist, which included Section 8121(b) requirements, to assess compliance with the CCA. In December 1999, the Army CIO approved the CCA compliance of Milestone IIIc, Increment 3, based on the PMO self-assessment checklist submission that addressed the five interest items outlined in the OSD(C^3I) guidance.

Information Technology Overarching Integrated Product Team.   The Information Technology Overarching Integrated Product Team (Overarching IPT) was minimally involved in the oversight of the RCAS. The primary role of the Overarching IPT was to provide advice to the CIO during milestone reviews. The Director, C^3I Acquisition (now the Director, Investment and Acquisition), Office of the Deputy Assistant Secretary of Defense (C^3I) CIO, chaired the Overarching IPT that was composed of senior managers representing the primary staff assistants with an interest in the RCAS. The Overarching IPT included senior managers from the offices of the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Under Secretary of Defense (Comptroller); the Director, Operational Test and Evaluation; the Director, Program Analysis and Evaluation; the Director, Defense Information Systems Agency; the Director, Command, Control, Communications, and Computer Systems, Joint Staff; and user representatives.

Although the Overarching IPT reviewed and concurred with draft acquisition decision memorandums before formal RCAS milestone decisions, it did not meet during milestone reviews to discuss the progress and status of the RCAS project and did not help identify potential programmatic problems . Instead, the Overarching IPT relied on a lower-level, Integrating IPT to provide critical RCAS oversight review and direction.

Integrating Integrated Product Team. The Integrating IPT members indicated that they continuously monitored the RCAS project; however, they were unable to provide summaries or minutes of meetings or any memorandums for the record on the level of input and guidance by representatives on significant programmatic issues discussed and resolved during reviews.

The Integrating IPT was co-chaired by the RCAS Project Manager and action officers from the offices of the ASD(C^3I); the Director, PA&E; the Director, Operational Test and Evaluation; and the Joint Staff. From September 1996 through March 2000, the Integrating IPT met 13 times to monitor program status, testing strategy, software encryption, information assurance, training, incremental fielding and testing issues, and Section 8121(b) certification. The Integrating IPT also tracked action items, audits, reviews, and corrective actions to address deficiencies identified by the Inspector General, DoD, and the General Accounting Office.

During the audit, the Integrating IPT showed improvements in maintaining informative minutes of IPT meetings. For the April 2001 review of RCAS Milestone IIId (Increment 4/5), the Integrating IPT produced a memorandum for the record that disclosed the specific issues discussed, actions needed to address those issues, and the next proposed Integrating IPT milestone review.

Program Funding. Although it had planned to fully deploy RCAS by the end of FY 2002 (later changed to March 2003), the Army still had not provided funding for operations and support requirements for the system. In the House of Representatives Armed Services Committee (the Committee) Report No. 106-616, "National Defense Authorization Act for FY 2001," May 12, 2000, the Committee expressed a concern that, without continued support and modernization, the Army Reserve could experience a serious deterioration in readiness.

The Committee also expressed concern that the Army had allocated only limited funding for the RCAS project in the Future Years Defense Program. In order to ensure that the program continued to enable the effective administrative support and mobilization capability required by the Reserve Components, the Committee expected the Department of the Army to program sufficient funds for RCAS. The Committee directed the Secretary of Defense to provide a report no later than March 1, 2001, to the Senate and House Committees on Armed Services detailing programmed funds for RCAS for FYs 2002 through 2007. As of June 2002, the Army had not completed and submitted the report to the Committees.

In the January 2001 Defense Acquisition Executive Summary report, the RCAS PMO reported a $765 million unfunded requirement in FYs 2002 through 2007

for operations and support required to operate and maintain the RCAS infrastructure. During its Milestone IIId review of Increment 4/5 in April 2001, the Integrating IPT decided that the unfunded requirement should be acknowledged in the CIO certification compliance package and in the Milestone IIId Acquisition Decision Memorandum. Specifically, in the July 2, 2001, Milestone IIId Acquisition Decision Memorandum, the Overarching IPT tasked the Army and the RCAS PMO to jointly work towards a strategy to resolve the unfunded requirement. The Army and the RCAS PMO were to report their findings and recommendations to the Overarching IPT and the RCAS General Officer Steering Committee before the end of FY 2001. In addition, the Acquisition Decision Memorandum stated that the RCAS "Other Procurement" funding for FY 2002 would not be obligated until the CIO, DoD, reviewed and approved the study and its recommendations.

Conclusion

The CIO certified that RCAS was developed in accordance with the CCA, although business process reengineering, an analysis of alternatives, and performance measures were not fully compliant with the intent of CCA requirements. Milestone III was too late in the RCAS development process to effectively use and fully capitalize upon these investment tools. The certification report to Congress should have explained that, due to RCAS Milestone III decision point, the project was not fully subjected to steps that could justify more than a qualified confirmation. Disclosure of compliance limitations would have provided a more accurate measure of the progress and results that respective IT investments made in complying with the CCA.

Also, although RCAS was past the stage where business processes reengineering and an analysis of alternatives could be most useful, performance measures to measure the functional benefits of RCAS after full deployment of the system should still be established and would still be beneficial. Further, the application of business process reengineering and analysis of alternatives principles would still be useful prior to initiating development of any future RCAS increment.

Management Comments on the Finding and Audit Response

Management Comments. The Deputy Chief Information Officer, DoD, concurred and stated that although certain CCA compliance limitations were recognized by DoD officials at the time of certification, achieving full compliance was also recognized as not practical because RCAS development was too advanced to remedy weaknesses that occurred early in the development process.

On behalf of the National Guard Bureau and the RCAS PMO, the National Guard Chief Information Officer and Program Executive Officer for Information Systems provided consolidated comments that nonconcurred with the finding. The National Guard Chief Information Officer stated that activities related to

each of the interest items were completed before the CCA was enacted and that the efforts followed the regulations, guidance, and best practices that were available at the time.

Audit Response. We agree that achieving full compliance may not have been practical because RCAS was already at Milestone III and that efforts followed the guidance that existed at the time. The review team also recognized limitations to full compliance. Accordingly, the CIO, DoD, certification that RCAS was being developed in accordance with the CCA should have been appropriately qualified.

The National Guard Chief Information Officer disagreed with other aspects of the finding and discussion. A summary of additional management comments and the audit response is in Appendix C. The full text of all management comments is in the Management Comments section of this report.

Recommendations, Management Comments and Audit Response

Revised, Deleted, and Renumbered Recommendations. Based on management comments, we revised draft Recommendation 3.a. to better express our intent. Based on management comments and additional audit work, we deleted draft Recommendation 4.a. Additionally, for clarity, we converted draft Recommendations 3.a. and 3.b. into distinctly separate recommendations. Therefore, draft Recommendations 3.a. and 3.b. have been renumbered as Recommendations 3. and 4., respectively. We also renumbered draft Recommendations 4.b. and 5. to Recommendations 5. and 6., respectively.

1. We recommend that the Chief Information Officer, DoD, establish policy to report limitations of project efforts for full compliance with the intent of the Clinger-Cohen Act requirements.

Management Comments. The Deputy Chief Information Officer, DoD, concurred and cited continuing efforts to develop, in coordination with DoD Component Chief Information Officers, specific criteria to enable uniform assessments of Clinger-Cohen Act compliance. Recent efforts include the development, during 2001, of an updated Clinger-Cohen Act certification and confirmation template. Further, two web sites were developed to enhance the procedures and approach used by DoD Components for determining Clinger-Cohen Act compliance.

Audit Response. Although Clinger-Cohen Act compliance reporting to Congress is no longer required, DoD acquisition guidance continues to require, prior to project initiation or milestone approval by the Milestone Decision Authority, confirmation by DoD Component CIOs that mission-critical or mission-essential information systems are being developed in accordance with

the Clinger-Cohen Act. Accordingly, the development of specific criteria should help to obtain more consistent and uniform assessments of Clinger-Cohen Act compliance.

2. We recommend that the Chief, National Guard Bureau; the Chief, Army Reserve; and the Reserve Component Automation System Management Officer review the five Section 8121(b)(2) interest items for the proposed capabilities of Increment 6, as appropriate, and any future increments, and determine whether the selected solution complies with the intent of the requirements of the Clinger-Cohen Act.

Management Comments. The National Guard and Army Reserve both provided qualified concurrences. The National Guard stated that business process reengineering and analysis of alternatives were accomplished during the earlier phases of RCAS development and that the reviews performed for each RCAS increment validate earlier milestone decisions by ensuring that requirements are satisfied. The Army Reserve stated that it strives to apply the principles of the Clinger-Cohen Act and to manage its network and associated systems and applications on an enterprise-wide basis. Accordingly, actions taken for RCAS will also be the actions taken on behalf of all Army Reserve systems.

Audit Response. Management comments did not address the intent of the recommendation. We recognize that business process reengineering and analysis of alternative efforts were performed more than 7 years ago and prior to the RCAS restructure in 1995. We also recognize that information technology has changed substantially over those 7 years. For information technology systems that are incrementally developed over a period of time, business processes or technological alternatives for implementing those processes should be periodically reexamined, as intended by the Clinger-Cohen Act. Accordingly, we request that the Chief, National Guard Bureau and the Chief, Army Reserve reconsider their responses to the recommendation and provide additional comments.

3. We recommend that the Chief, National Guard Bureau and the Chief, Army Reserve require functional proponents of the Reserve Component Automation System to establish functional performance measures to better assess both the initial and future impact of RCAS on supported functionalities.

Management Comments. The National Guard concurred in principle. The National Guard agreed on the importance of performance measures and stated that functional performance measures relating to administration, interoperability, logistics, and security already exist and are documented. The existing performance measures quantitatively set standards for hundreds of Reserve Component processes and compare attributes of the new RCAS business processes to the pre-RCAS business process.

The Army Reserve concurred with the intent of the recommendation, but stated that because RCAS supported only some of the business processes within each of the functional areas, measurement of RCAS operations in isolation of other

15

supporting systems would potentially be counterproductive or misleading. Alternatively, the Army Reserve is pursuing a more holistic means to catalog and measure supporting information systems by building an information technology portfolio, which will identify all systems and applications that contribute to functional mission accomplishment. As a contributor to several functional areas, RCAS is captured in the Army Reserve's information technology portfolio.

Audit Response. Management comments were partially responsive. Although the National Guard indicated that functional performance measures had been developed and were in place, the system of measures cited focused on enabling economic analyses and operational testing, rather than on measuring and assessing key improvements in each of the 11 functional areas supported by RCAS. Some of the existing measures could be used to assess RCAS functional performance and to help track improvements from future RCAS enhancements. However, it is not clear how the functional contributions provided by RCAS are assessed and monitored as part of the Army Reserve information technology portfolio. Accordingly, we revised the recommendation to clarify our intent and request that the National Guard and the Army Reserve provide additional comments on the revised recommendation.

4. We recommend that the Chief, National Guard Bureau and the Chief, Army Reserve assess the risk of exchanging unencrypted files containing sensitive data between the Reserve Component Automated System for proposed and fielded increments and other networked systems and, if appropriate, implement encryption technology.

Management Comments. The National Guard and Army Reserve conditionally concurred. The National Guard stated that the risks associated with exchanging unencrypted files had been previously assessed by the Army and was categorized as low. Additionally, the Designated Approval Authority for RCAS will reexamine the subject risks during the next accreditation review, which is scheduled for November 2002. Accordingly, the National Guard felt that the recommended action by the National Guard and the Army Reserve is not required. The Army Reserve stated that RCAS interfaces with other Army Reserve systems within a secure network boundary, which minimizes the security risks. The Army Reserve also cited initiatives to consolidate the RCAS infrastructure into consolidated data centers with tightly controlled access in and out of those centers.

Although not required to respond, the Army Deputy Chief Information Officer (The Army Deputy CIO) concurred. Citing his responsibilities as the Designated Approving Authority for RCAS, he stated that the risks related to the exchange of unencrypted files will be specifically examined during the scheduled reaccreditation of RCAS in November 2002. Further, the Army Deputy CIO will specifically review and determine whether RCAS file exchanges should continue to be unencrypted or additional security measures are merited.

5. We recommend that the Reserve Component Automation System Project Manager develop a plan, prior to the Milestone IIIe review, for the approval of the Chief Information Officer, Department of the Army, that funds the operation and support of the Reserve Component Automation System for FYs 2002 through 2007.

Management Comments. The National Guard, responding for the RCAS Project Manager, conditionally concurred. The RCAS Project Manager and the Army CIO worked jointly to identify sufficient funding to sustain RCAS. Additionally, the Army recently directed more than $300 million to address RCAS life-cycle shortfalls in funding. As a result, the Army Deputy Chief of Staff for Program Analysis and Evaluation declared RCAS as affordable.

Although not required to respond, the Army Deputy CIO concurred and stated that sufficient funding to sustain RCAS for FYs 2002 through 2007 had been identified. Accordingly, the Army CIO certified on February 25, 2002, to the CIO, DoD, that RCAS out-year funding issues had been resolved. Because RCAS funding issues were resolved, the CIO, DoD, approved Milestone IIIe and authorized the fielding of RCAS Increment 6 on March 25, 2002.

6. We recommend that the Assistant Secretary of the Army, Acquisition, Logistics and Technology, expedite a report, which was due by March 1, 2001, to the Senate and House Committees on Armed Services, that details sufficient programmed funds for administrative support and mobilization capability for RCAS for FYs 2002 through 2007.

Management Comments Required. The Assistant Secretary did not comment on a draft of this report. We ask that the Assistant Secretary provide comments on the final report.

Appendix A. Audit Process

Scope and Methodology

We evaluated the basis for the certification made to Congress in response to Section 8121(b), and the effectiveness of oversight provided by the Overarching IPT, the Acquisition Oversight IPT, and the milestone reviews. Specifically, we reviewed the certification process, including the compliance report prepared by the RCAS PMO, briefing charts used to brief the Deputy CIO on the RCAS certification process, and the certification report submitted to Congress by the CIO.

We discussed various aspects of the RCAS certification process, procedures, and information provided to Congress with staffs of the Director, Army National Guard; the Director, Program Analysis and Evaluation; and the CIO.

We inquired about the oversight provided by the OSD Information Technology Overarching IPT. We reviewed project documents dating from July 1987 through July 2001. We determined whether project officials adequately prepared key documentation prior to the Milestone IIIc review on December 14, 1999.

We reviewed the Acquisition Decision Memorandums issued for the Milestone IIIa (September 1996), IIIb (January 1998), and IIIc (May 2000) reviews and determined whether the exit criteria provided in the Acquisition Decision Memorandums were well-defined and enforced by the Milestone Decision Authority and his staff. Finally, we reviewed the actions taken in response to prior audits and reviews of the RCAS project.

General Accounting Office High-Risk Area. The General Accounting Office has identified several high-risk areas in DoD. This report provides coverage of the Information Management and Technology high-risk area.

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Use of Technical Assistance. We received technical assistance from a computer engineer in the Technical Assessment Division, Audit Followup and Technical Support Directorate. The computer engineer reviewed RCAS documentation on information security and testing. Specifically, the computer engineer reviewed the system security authorization agreement, the certification report, the risk assessment, the security user's manual, the security standing operating procedures guide, and the system security architecture.

Audit Type, Dates, and Standards. We performed this audit from January 2001 through April 2002, in accordance with generally accepted government auditing standards.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available upon request.

Prior Coverage

Inspector General of the Department of Defense (IG DoD)

IG DoD Audit Report No. 97-019, "Evaluation of the Reserve Component Automation System," November 1, 1996

IG DoD Audit Report No. D-2000-137, "Certification of the Defense Civilian Personnel Data System," June 7, 2001

Appendix B. Clinger-Cohen Act of 1996 and Statutory Requirements

Clinger-Cohen Act of 1996. The CCA requires Federal agencies to focus on the results achieved through IT investments while streamlining the IT procurement process. Specifically, the CCA introduced additional precision and structure into the way that agencies approach the selection, acquisition, and management of IT. A primary requirement of the CCA was to establish the position of the CIO for each Federal agency.

Therefore, in June 1997, the Secretary of Defense designated the ASD(C^3I) as the CIO for DoD and conferred the authority and responsibility for implementing certain aspects of the CCA. The CIO responsibilities include:

- designing and implementing a process for maximizing the value and assessing and managing the risks of DoD IT acquisitions;

- institutionalizing performance- and results-based IT management; and

- providing advice and other assistance to the Secretary of Defense and other senior DoD managers to ensure that IT acquisition and information resources are managed in accordance with the policies of the CCA.

The CIO is also responsible for the management and oversight of all DoD IT systems. Specific responsibilities include overseeing the performance of IT projects and measuring project progress through system milestone reviews.

Statutory Requirements. Congress enacted Section 8121(b) , "Certifications as to Compliance with the Clinger-Cohen Act" of the DoD Appropriations Act for FY 2000, which states:

> (1) During the fiscal year 2000, a major automated information system may not receive Milestone I approval, Milestone II approval, or Milestone III approval within the Department of Defense until the Chief Information Officer certifies, with respect to that milestone, that the system is being developed in accordance with the Clinger-Cohen Act of 1996 (40 U.S.C 1401 et seq.). The Chief Information Officer may require additional certifications, as appropriate, with respect to any such system.

> (2) The Chief Information Officer shall provide the congressional defense committees timely notification of certifications under paragraph (1). Each such notification shall include, at a minimum, the funding baseline and milestone schedule for each system covered by such a certification and confirmation that the following steps have been taken with respect to the system:

A)   Business process reengineering.

B)   An analysis of alternatives.

C)   An economic analysis that includes a calculation of the
        return on investment.

D)   Performance measures.

E)   An information assurance strategy consistent with DoD
        Command, Control, Communications, Computers,
        Intelligence, surveillance, and Reconnaissance
        Architecture Framework.

Section 8121(b) requirements were only applicable during FY 2000. However, Congress extended essentially the same certification requirements through FY 2001 by enacting Section 8102(b), "Certifications as to Compliance with the Clinger-Cohen Act," of the DoD Appropriations Act for FY 2001. The DoD Appropriations Act for FY 2002, section 8104(b) again extended a certification requirement prior to milestone approval, but limited the scope of that requirement to major automated information systems for financial management and required that the Under Secretary of Defense (Comptroller) certify that the system is being developed in accordance with the DoD Financial Management Modernization Plan.

Appendix C. Summary of Management Comments on the Finding and Audit Response

Responding jointly for the Chief, National Guard Bureau and the RCAS PMO, the National Guard Bureau Chief Information Officer and Program Executive Officer for Information Systems disagreed with several topical area discussions in the draft report. Management nonconcurred with our discussions of the RCAS certification process, business process reengineering, analysis of alternatives, economic analysis, performance measures, the integrating IPT, milestone exit criteria, and the conclusion. Management also commented on several inaccuracies in the draft report.

Management Comments on the RCAS Certification Process. Regarding the qualifications for business process reengineering and analysis of alternatives presented by the OSD review team in its briefing of the draft CIO RCAS certification report, management indicated that the qualifications were not merited. Management stated that the RCAS PMO provided an extensive set of artifacts regarding the occurrence of and content of those activities.

Audit Response. As discussed in the report, the OSD review team did not consider steps taken by the RCAS project sufficiently rigorous to meet the intent of the CCA for business process reengineering or analysis of alternatives.

Management Comments on Business Process Reengineering. Management stated that the CCA requires agencies to revise mission-related processes and that the RCAS PMO provided a variety of documentation showing that business processes were refined prior to significant RCAS investment. Additionally, the CCA makes no mention of business process reengineering or specific techniques to use for process revision. Citing functional process improvement that began in 1989 and continued through the RCAS restructure in 1995, management cited extensive study and documentation to create and refine core business processes across 11 functional areas. By 1996, RCAS had completed business process reengineering efforts and set requirements for all increments. Accordingly, it would be unreasonable to expect the RCAS PMO or the functional users to conduct further business process reengineering on any of the increments, regardless of their occurring after the enactment of the CCA.

Audit Response. We agree with management on the stated requirements of the CCA. However, Section 8121(b) required that the CIO, in the certification report to Congress, describe steps taken in regard to business process reengineering. The differences between business process reengineering and business process improvements are discussed in the report. The report recognized business process improvements undertaken during RCAS development, but also it concluded that those efforts do not meet the higher standards inherent in business process reengineering or the intent of the CCA. We do not necessarily agree with management that once requirements are

22

established, it is unreasonable to conduct further business process reengineering. Such an approach may preclude leveraging subsequent technological or functional improvements.

Management Comments on Analysis of Alternatives. For the range of alternatives considered during the August 1996 analysis, management stated that the analysis leading to the RCAS restructure in 1995 demonstrated that multiple technical solutions, project organizations, and day-to-day business processes were evaluated before selecting the RCAS solution. Regarding the possible outsourcing of selected RCAS functions, management stated that, in meeting the Federal Activities Inventory Reform Act requirement for agencies to annually identify those activities not inherently governmental, senior Army executives have not identified any jobs or functions that RCAS supports. Further, the National Guard outsources to the States those functions not uniquely military or inherently governmental.

Audit Response. We acknowledge that the cited alternatives were analyzed prior to the RCAS restructure in 1995. However, the RCAS PMO provided no evidence that the analyses of alternatives, including those documented for the Milestone IIIa review in August 1996, considered the privatization of routine administrative processes. Accordingly, we concluded that RCAS managers did not meet one of the tenets of the CCA: determining whether the function could be performed more effectively and at less cost by the private sector. We also acknowledge that the thrust of the Federal Activities Inventory Reform Act is to reduce the federal workforce by outsourcing those positions and activities that are not inherently governmental. However, that Act was not passed until October 1998, well past the period discussed. Because privatization of routine administrative processes was not addressed by RCAS or functional officials in the analysis of alternatives, we continue to conclude that the RCAS certification should have been appropriately qualified.

Management Comments on Economic Analysis. Regarding the quantification and tracking of RCAS benefits, management stated that RCAS management has quantified the productivity improvements derived by the project by evaluating labor requirements, cycle time, frequency, and output quality for RCAS processes. The RCAS PMO also performs post-implementation reviews to quantitatively track the actual realization of cost savings and productivity improvements.

Audit Response. We agree that RCAS quantitatively expressed cost and benefits in the formal cost benefit analysis produced to support each increment. We also agree that the productivity improvements for each increment are assessed and quantitatively expressed during each post-implementation review. However, that was not the intended focus of our discussion in the draft report. Our intent was to describe that the anticipated benefits of RCAS were primarily based on productivity improvements and not on actual cost reductions or "hard" savings. We have amended the economic analysis discussion on page 8 of this final report to better express our intent.

Management Comments on Performance Measures. Management stated that key functional requirements were established during the RCAS restructure in 1995. Grouped into six performance measurement categories, these requirements were then incorporated into the Acquisition Program Baseline. Key performance parameters and measures of effectiveness were then designated, including many functional performance measures such as mobilization order processing times and maintenance response times. To determine how well RCAS meets the key performance parameters, the Army Test and Evaluation Command employs both operational and mobilization activities to measure functional performance. Additionally, the functional performance of each RCAS increment is independently analyzed. As of March 2002, management stated that more than 100 functional processes had been measured. This approach provides the RCAS Project Manager and the user community with both functional and system performance measures.

As to the use of benchmarking, management stated that the RCAS functional communities used benchmarking during the process selection workshops conducted during the late 1980s. Additionally, benchmarking was used, among other techniques, during the RCAS restructure to derive low, medium, and high-risk alternative sustainment strategies. A "Benchmark Interview Guide" was used to evaluate 4 existing Government programs and at least 15 commercial vendors.

Audit Response. We agree that some of the measures established could be used as effective functional performance measures. However, the system of measures cited by management was established primarily to measure system performance, to establish performance parameters for operational testing, and to aid in determining the systems economic benefits. As expressed in the report, the main purpose of functional performance measures is to enable the functional community, or communities, to quantitatively assess the amount of functional gain provided from its investment in a new system. After the system is completed, ongoing measurement of functional performance should also enable the functional community to continually assess whether investments in system maintenance or upgrades are worthwhile from a functional perspective. Additionally, continual measurement of functional performance provides a performance baseline from which the functional gains attributable to future new systems can be soundly determined.

As to benchmarking, management did not provide supporting documentation regarding the use of benchmarking in the late 1980s. Further, management statements regarding the use of benchmarking to evaluate alternative sustainment strategies could be misleading because they used benchmarking to select an approach to system maintenance, which is not relevant to functional performance measures. However, because the functional communities supported by RCAS did not establish a functional performance baseline prior to RCAS development, benchmarking could be of benefit in the establishment of functional performance measures. Benchmarks representing the functional performance of leading organizations could be used as a functional performance goal. A system of functional performance measures would enable RCAS users to measure progress toward achieving that goal.

Management Comments on Integrating Integrated Product Team. As to the date of the Milestone IIIe review, management stated that the review occurred in October 2001, but that, as of January 2002, the related Acquisition Decision Memorandum had not been issued.

Audit Response. We agree with management and have accordingly revised the report.

Management Comments on Milestone Exit Criteria. In regards to the effectiveness of RCAS training, management stated that the exit criteria established by the DoD CIO for Milestone IIIc (Increment 3) were met. More important, management stated that substantial improvement had been made in training RCAS users since the fielding of Increment 3. Those improvements are illustrated in the operational testing reports of the Army Test and Evaluation Command for Increments 4/5 and 6. Management stated that during the recent evaluation of RCAS Increment 6, the Army Test and Evaluation Command rated training as one of the project's areas of strength.

Audit Response. As a result of management comments, we reviewed the operational test report for Increment 4/5. Because the operational test report was not yet available, we also reviewed the Army Test and Evaluation Command briefing charts for Increment 6 and discussed the adequacy of RCAS Increment 6 training with Army Test and Evaluation Command personnel. As a result, we agree that RCAS user training had significantly improved since Increment 3 and was no longer a reportable weakness. Accordingly, we removed the subject discussion and associated recommendation from this final report.

Management Comments on Conclusion. Regarding the application of CCA principles to future RCAS increments that contain new functions, management stated that no new functions have entered the RCAS production process since the project's Milestone III decision in 1996.

Audit Response. Our intent was that RCAS managers reexamine business process reengineering and analysis of alternatives prior to initiating development of any future increment. Although the RCAS Milestone III was approved in 1996, the dynamics of the IT marketplace continue to provide opportunities for enabling business process reengineering efforts. Accordingly, investments in future RCAS increments should be examined within the context of the Clinger-Cohen Act. We revised the conclusion in this report to better express our intent.

Management Comments on Inaccuracies in the Draft Report. Management identified items requiring correction, such as: RCAS is a project instead of a program; the head of the RCAS PMO is the project manager and not the project management officer; and the Reserve Components should be referred to as the Army Reserve Component.

Audit Response. We made those corrections.

Appendix D. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)
   Deputy Chief Financial Officer
   Deputy Comptroller (Program/Budget)
   Director, Program Analysis and Evaluation
Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)
   Deputy Assistant Secretary of Defense (Deputy Chief Information Officer)
     Director, Investment and Acquisition

Department of the Army

Assistant Secretary of the Army (Acquisition, Logistics, and Technology)
Inspector General, Department of the Army
Auditor General, Department of the Army
Chief Information Officer
Chief, National Guard Bureau
   Program Executive Officer for Information Systems
     Project Manager, Reserve Component Automation System
Chief, Army Reserve

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Auditor General, Department of the Air Force

Other Defense Organizations

Director, Defense Contract Audit Agency
Director, Defense Contract Management Agency
Director, Defense Finance and Accounting Service
Director, Defense Logistics Agency
Director, National Security Agency
   Inspector General, National Security Agency
Inspector General, Defense Intelligence Agency
Inspector General, Defense Threat Reduction Agency
Commandant, Defense Systems Management College

Non-Defense Federal Organization

Office of Management and Budget
   National Security Division
   Office of Information and Regulatory Affairs

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Efficiency, Financial Management, and
   Intergovernmental Relations, Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International
   Relations, Committee on Government Reform
House Subcommittee on Technology and Procurement Policy, Committee on
   Government Reform

Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) Comments

DEPARTMENT OF DEFENSE
6000 DEFENSE PENTAGON
WASHINGTON, DC 20301-6000

March 20, 2002

CHIEF INFORMATION OFFICER

MEMORANDUM FOR DIRECTOR, ACQUSITION MANAGEMENT
DoD OFFICE OF THE INSPECTOR GENERAL

SUBJECT: DoDIG Audit, Certification of the Reserve Component Automation System
(RCAS) (Project No. D2000AS-0212.001)

• **FINDING:** Limitations of the RCAS Program efforts for Increments 3 and 4/5 for
compliance with the intent of the CCA were not reported by the CIO, DoD. The limitations
directly affected three of the five interest items that were specified in Section 8121(b)(2). This
condition occurred because the CIO did not believe that the weaknesses associated with
business process reengineering and the analysis of alternatives were significant enough to
withhold the CCA certification. In addition, the CIO did not identify any weakness in
performance measures even though the RCAS PMO and the Reserve Components had not
established functional performance measures. Accordingly, Congress was not informed that
the RCAS was not being developed in full compliance with CCA requirements.

DoD CIO COMMENTS: Concur.

The appropriate DoD officials did consider the limitations directly affecting the areas of
business process reengineering, analysis of alternatives, and performance measures during the
CCA certification review for Increment 3 (Milestone IIIc). These officials reached a similar
position as the DoDIG. They also concluded that because RCAS was in an advanced stage of
development and deployment when CCA was enacted, it most likely would not fully meet the
tenets of the CCA since the opportunities to realize the most substantial benefits from "up
front" efforts such as business process reengineering or analysis of alternatives were reduced
by that time. Nevertheless, the RCAS PMO and the functional proponents did attempt to
redress deficiencies in administrative processes that were adversely affecting the performance
of a core mission – namely mobilization. In addition, the RCAS certification package was
provided in draft to congressional staff for review and comment. Their comments were
incorporated into the certification process and briefed to senior staff.

During the CCA certification review for Increment 4/5 (Milestone IIId), except for
determining that the sustainment requirements for RCAS lacked sufficient funding, the OSD
staff determined that no major changes or issues occurred since the initial certification. We
identified affordability explicitly in the updated certification report as a major issue that had a
direct bearing on whether the performance goals could be achieved. While the affordability
was not an issue for the earlier certification, we determined that a subsequent POM cycle did
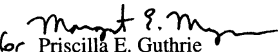
not fund needed sustainment requirements. In an acquisition decision memorandum of July 2, 2001, the DoD CIO directed Army to conduct an affordability analysis before the next fielding decision. On February 25, 2002, the Army CIO reported that the analysis has been conducted and indicates that the RCAS program is affordable.

● **RECOMMENDATION 1.** We recommend that the Chief Information Officer, DoD, to best meet the intent of Clinger-Cohen Act, establish policy to fully report program compliance limitations.

DoD CIO Comments: Concur.

We will continue to work with the Component CIOs to develop specific criteria to enable uniform assessments of CCA compliance. In 2001, we established a DoD CCA Certification Report Integrated Process Team (IPT) that developed a CCA certification and confirmation template that updated the information contained in our memorandum of July 13, 2000, "Department of Defense (DoD) Information Technology (IT) Systems Certification Requirements." These efforts resulted in two web sites being established to further enhance the procedures and approach to be used by DoD Components for determining whether major automated information systems are developed in accordance with the Clinger-Cohen Act of 1996.

If you have any question on the above, please direct them to my action officer, Mr. Edward Wingfield, at (703) 602-0980 x126 or ed.wingfield@osd.mil.

for Priscilla E. Guthrie
Deputy Chief Information Officer

cc: Chief, National Guard Bureau
    Chief Information Officer, Department of the Army
    Assistant Secretary of the Army for Acquisition, Logistics, and Technology

National Guard Bureau Comments

DEPARTMENTS OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU
1411 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202-3231

NGB-CIO

22 March 2002

MEMORANDUM FOR MARY L. UGONE, DEPUTY DIRECTOR ACQUISITION
MANAGEMENT DIRECTORATE, INSPECTOR GENERAL, DEPARTMENT OF
DEFENSE, 400 ARMY NAVY DRIVE, ARLINGTON, VA 22202

SUBJECT: Audit Report on Certification of the Reserve Component Automation
System (Project No. D2000AS-0212.001)

1. Reference memorandum, DOD IG, 23 January 2002, subject as above.

2. Enclosure 1 is the response to the tentative findings and recommendations
contained in the draft report.

3. The point of contact in my office is Judith Peterson, DSN 327-3369 or commercial
(703) 607-3369, email: judy.peterson@pmorcas.ngb.army.mil

FOR THE CHIEF, NATIONAL GUARD BUREAU

Encl

MAUREEN T. LISCHKE
Chief Information Officer and
Program Executive Officer for
Information Systems

CF:
CNGB
DARNG

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

NGB CIO/PEO IS comments are provided below under three major categories:

I   Comments on Audit Report Findings;
II   Comments on Audit Report Recommendations; and
III   General Comments on Facts as Presented in the Draft Audit Report.

I. Comments on Audit Report Findings

I-A. DOD IG Finding – Introduction (Page 4):

*Limitations of the RCAS Program {Project} efforts for Increments 3 and 4/5 for
compliance with the intent of the CCA were not reported by the CIO, DoD. The
limitations directly affected three of the five interest items that were specified in Section
8121(b)(2). This condition occurred because the CIO did not believe that the weaknesses
associated with business process reengineering and the analysis of alternatives were
significant enough to withhold the CCA certification. In addition, the CIO did not
identify any weakness in performance measures even though the RCAS PMO and the
Reserve Components had not established functional performance measures.*

NGB CIO/PEO IS Comments: Non-concur

Required activities were completed before the CCA was enacted, following the
regulations, guidance, and best practices that were available at the time, many of which
became incorporated into the CCA. The Project has provided extensive documentation in
this regard. Further, the following comments will demonstrate that RCAS properly
addressed all five interest items including Business Process Reengineering, Analysis of
Alternatives, and Performance Measures.

I-B. DOD IG Finding on RCAS Certification Process (Page 4):

*During its briefing to the CIO, the review team presented a qualified statement for
actions regarding business process reengineering and the analysis of alternatives
because business process workflows had not been substantially redesigned. Additionally,
the PMO had not considered a full range of approaches for the analysis of alternatives to
reduce costs, outsource services, streamline operations, or privatize functions.*

NGB CIO/PEO IS Comments: Non-concur

The Project has provided an extensive set of artifacts in regard to the occurrence of and
content of these activities.

I-C. DOD IG Finding on Business Process Reengineering (Page 6):

1

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

*Although representatives from the offices of the ASD (C3I) and the Director, PA&E,
acknowledged that DoD and the Army had not focused on the use of activity-based
costing techniques to simplify or otherwise redesign business processes before investing
in RCAS, the certification report to Congress did not clearly explain that RCAS business
process reengineering did not completely meet the full intent of the CCA.*

NGB CIO/PEO IS Comments: Non-concur

While we agree that activity-based costing (ABC) techniques provide additional insight
into an agency's processes, we don't believe that the absence of ABC is an indicator that
Business Process Reengineering (BPR) did not occur. The Clinger-Cohen Act requires
agencies to revise (doesn't use the term BPR) mission-related processes and does not
mandate specific techniques to utilize. The Project provided a variety of artifacts that
documented that the Army Reserve Component refined its business processes prior to any
significant RCAS investment.

I-D. DOD IG Finding on Business Process Reengineering (Page 6):

*Although the RCAS investment should improve and support work processes to reduce
cost, improve effectiveness, and implement Government and commercial off-the-shelf
technology, the work processes of the Reserve Components were not fully subjected to
business process reengineering....*

*Efforts undertaken by the RCAS PMO to justify information technology investments in the
system did not identify, dramatically redesign, and eliminate low or no value-added
functions or work processes before deciding to invest in RCAS. ... The efforts of RCAS
stakeholders and program officials related to business process reengineering could, at
best, be considered an improvement in the functional process; however, they could not be
considered a redesign and reengineering of established business processes or workflows.*

NGB CIO/PEO IS Comments: Non-concur

RCAS conducted significant business process reengineering efforts during the early
stages of the Project. Beginning in 1989, the PMO facilitated user workshops with over
500 Army National Guard (ARNG), U.S. Army Reserve (USAR), and Active Army
functional users to ensure all business processes were accurately created (many didn't
exist), refined, and documented. Additionally, no value/low value processes were
eliminated during these workshops. The RCAS Functional Description (FD)(July 1995),
documents the results of these activities in 25 volumes. During the Project's Restructure,
the functional requirements of the FD were consolidated into the Operational Concept
Document (OCD). The OCD was utilized to create the RCAS Enterprise Model, which
documents the RC's information needs and business processes across 11 functional areas.
From the Enterprise Model, Use Cases (11 Volumes documenting pre-automation

2

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

business processes) were developed for each functional area, which ultimately formed the foundation of the RCAS design requirements. Thus, before RCAS design requirements were translated into an Information Technology (IT) investment, the RC functional communities had created, refined, and documented core RC business processes. These efforts fundamentally changed the way the ARNG and the USAR conducted business in the functional areas that RCAS addresses and meet the intent of CCA.

I-E. DOD IG Finding on Business Process Reengineering (Page 7):

In essence, the PMO, in conjunction with the functional proponents, had not performed business process reengineering on any of the RCAS increments since the 1996 enactment of the CCA.

NGB CIO/PEO IS Comments: Conditionally Concur

Although we agree that the statement is true, by 1996 RCAS had already been restructured, the requirements for all increments were set, and Milestone II approval had been received. The Milestone III increment decisions are not an appropriate time to conduct BPR since they are merely the extension of the earlier decisions. Therefore, it should not be expected that RCAS or the functional users would conduct additional BPR on any of the increments, regardless of their occurring after the enactment of the CCA. The DOD IG in its conclusion to the audit (page 14) states that RCAS was past the stage where business process reengineering would be useful.

I-F. DOD IG Finding on Business Process Reengineering (Page 7):

The PMO exerted extensive efforts to overcome the inadequacies of existing methods and procedures by proposing to automate inefficient, functionally disconnected, and manual processes.

NGB CIO/PEO IS Comments: Non-concur

The Project provided substantial evidence that the Project, in concert with the user community, analyzed alternatives and refined business processes prior to crafting the technical solution.

I-G. DOD IG Finding on Analysis of Alternatives (Page 7):

The PA&E office qualified its assessment of the analysis of alternatives in the February 2000 briefing to the CIO because the August 1996 analysis of alternatives did not consider a full range of alternatives to reduce cost, such as outsourcing specific functions, streamlining or privatizing routine administrative processes.

NGB CIO/PEO IS Comments: Non-concur

3

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

The Project's restructure in 1995 was the result of a major Analysis of Alternatives
(AoA) documented in the Validation Assessment Team's (VAT) Final Report. It
demonstrates that, beyond exploring several alternatives, the VAT evaluated multiple
technical solutions, Project organizations, and day-to-day business processes before
selecting the RCAS solution.

I-H. DOD IG Finding on Analysis of Alternatives (Page 8):

*The PMO stated that RCAS was exempt from outsourcing routine administrative
processes because the system was established under title 10, United States Code, Armed
Services Program because it supported numerous inherent Government functions, such
as manning, equipping, training, and sustaining the Army's Reserve Components. ... The
PMO did not provide any documentation to show how RCAS was an inherent government
function.*

NGB CIO/PEO IS Comments: Non-concur

The PMO stated on April 3, 2001, "RCAS supports the Title 10 functions of manning,
equipping, training, and sustaining the Army Reserve Component." In accordance with
the Federal Activities Inventory Reform (FAIR) Act, agencies annually identify those
activities not considered inherently governmental. To date, the functions and jobs that
RCAS supports are not known to be identified on the Army's FAIR Act inventories.
Also, the National Guard outsources to the states those functions not uniquely military or
inherently governmental. In the case of both the National Guard and Reserve, military
and dual status technicians staff many of the remaining functions. Technicians are
required by law to be members of the Army Reserve Component as well.

I-I. DOD IG Finding on Economic Analysis (Page 8):

*However, we noted that the benefits used in the computation of the return on investment
consisted of "soft dollars" or benefits that could not be quantitatively tracked. The
PA&E office questioned the amount of actual benefits because it represented
unquantifiable benefits. Because the return on investment was based on unquantifiable
benefits, the use of performance measures to assess the benefits of the RCAS investment
becomes even more important.*

Revised

NGB CIO/PEO IS Comments: Non-concur

RCAS has quantified the productivity improvements derived by the project. The Project
has accomplished seven cost benefit analyses (CBA) in the last six years. To determine
the Project's Return on Investment (ROI), RCAS cost-savings and productivity
improvements have been quantitatively expressed by evaluating labor requirements, cycle
time, frequency, and output quality for RCAS business processes. Based on the Project's

4

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

CBA strategy, the PMO also performs post-implementation reviews to quantitatively track the actual realization of system benefits (i.e., cost-savings and productivity improvements). All of the RCAS Economic Analyses quantify the benefits of RCAS and reveal a substantial ROI. RCAS also generates non-quantifiable benefits such as improved timeliness and accuracy of data. These are identified in the CBA but not used to calculate the ROI.

I-J . DOD IG Finding on Performance Measures (Page 8):

Revised

Functional Proponents of RCAS did not establish a performance measurement plan to assess performance or to identify whether the desired results were being achieved. Specifically, new processes were not compared against measures of outcome, output, and efficiency of RCAS.

NGB CIO/PEO IS Comments: Non-concur

The National Guard Bureau and Army Reserve functional proponents captured key functional requirements in the RCAS Operational Concept Document (OCD) during the Project's restructure in 1995. These included six major RCAS functional/technical performance measure categories: 1) Administrative Operations, 2) Interoperability, 3) Logistics, 4) Security, 5) MANPRINT, and 6) Reliability. While there were no metrics established to quantify functional performance at that time, it was uniformly understood that accomplishment of the OCD requirements would dramatically improve business processes.

The RCAS Project Manager (PM) then incorporated these requirements into the RCAS Acquisition Program Baseline (APB). The PM worked with the user community to develop key performance parameters (KPP) and measures of effectiveness (MOE), which included many functional performance metrics. Examples include mobilization order processing times, logistics response times, and maintenance response times.

To independently measure the Project's ability to meet these functional/technical performance measures, the National Guard Bureau partners with the Army Test and Evaluation Command (ATEC) to measure functional/technical performance via both operational and mobilization activities. In addition, the National Guard Bureau directs independent benefit analyses to be accomplished on each increment of RCAS functionality. These benefit analyses periodically measure the actual functional processes to identify process improvements, cycle times, cost-savings, and labor requirements. To date, the National Guard Bureau has measured 100+ functional processes. Examples include: retirement eligibility, organizational authority publication, and medical readiness.

This approach provides the PM and the user community with both functional and system performance measures, which is consistent with the intent of the CCA.

5

36

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

I-K. DOD IG Finding on Benchmarks (Page 9):

Although the CIO Certification report stated that benchmarks were used to derive risk-adjusted alternative technical solutions during the 1995 restructure of the program, the PMO did not provide any documentation to support its benchmarking efforts.

NGB CIO/PEO IS Comments: Non-concur

The Reserve Component (RC) functional communities used benchmarks during the user workshops conducted from 1985 through 1989. They benchmarked against each other (e.g., Iowa compared to Indiana, National Guard process compared to Army Reserve process) and in concert with federal agencies that might be involved in the same or similar business processes (e.g., OSHA, VA). These workshops resulted in the refined processes documented in the RCAS Functional Description (FD), which form the foundation of RCAS requirements. A complete trace of this process was provided to DOD IG earlier in the audit.

 In addition, during the Project's restructure, benchmarking, modeling, trade-off analyses, and user expectation management techniques were utilized to derive low, medium, and high-risk alternatives. As one example, the RCAS Validation Assessment Team (VAT) conducted benchmark studies during the analysis of alternative sustainment strategies. The VAT, using a "Benchmark Interview Guide," evaluated and sought suggestions from four existing Government programs and at least fifteen commercial vendors. This documentation was provided separately to the DOD IG on 21 March 2002.

I-L. DOD Finding on Integrating Integrated Product Team (Page 12)

As of January 2002, the review (Milestone IIIe) had not occurred.

NGB CIO/PEO IS Comments: Non-concur

The Milestone IIIe review occurred in October 2001. As of January 2002, the Acquisition Decision Memorandum had not been issued.

I-M. DOD IG Finding on Milestone Exit Criteria (Page 12):

Although the PMO and the Army Reserve provided an updated training strategy on March 8, 1999 {1998}, as directed in the January 8, 1998, Acquisition Decision Memorandum for Milestone IIIb (Increment 2), the strategy did not include a schedule for implementing training improvements...

Revised

Deleted

6

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

*In its March 2000 assessment of Increment 3, the Army Test and Evaluation Command
identified training as a major problem area and stated that user training must be
significantly improved....*

*Although the PMO and the Army Reserve provided a revised training strategy, they still
need to develop a viable training plan, for Army approval, that provides the required
training and documentation support for RCAS users, system administrators, and
command-level representatives and a schedule for implementing the training.*

NGB CIO/PEO IS Comments: Non-concur

The Office of the Chief, Army Reserve developed a training strategy within 60 days
leading to the improvement and expansion of COTS training as directed by the
Acquisition Decision Memorandum (ADM) for Increment 2. The strategy and schedule
are contained with the "Reserve Component Automation System Training Plan"
published by the Army Reserve Chief Information Office (BG Helmly) on March 8,
1998. Paragraph 5 of the plan defines the schedule for implementing improved training
in three phases. This sequential schedule provides the necessary guidance for unit
commanders to develop their individual soldiers' training plans. This fully met the
requirements and intent of the ADM at the Milestone IIIc review. This document was
provided to the DOD IG.

The Project, with the full support of the users, has developed a "viable training plan" for
each Increment. The plan and its implementation have matured with the Project. The
training strategy for Increment 2 (primarily COTS) was based primarily on unit
evaluation and individual self-paced instruction and resulted in the ADM direction.
Increment 3 began the fielding of RCAS-developed applications and with it a revision to
the training strategy. As a result of the Army Test and Evaluation Command's (ATEC)
assessment of Increment 3 training, the Project determined that self-instruction on RCAS-
developed applications, with users relying primarily on a Software User's
Manual/Training Materials (SUM/T) (project developed training documentation) was
insufficient. Therefore, with Increment 4/5, Programs of Instruction (POI) were
developed for RCAS-developed applications and the Classified Capable Workstation
(CCW), and OIS site users received hands-on classroom instruction. Additionally,
Database and Installation Workshops were instituted and a modularized RCAS
Administrator POI was developed. The training enhancements instituted with Increment
4/5 continued into Increment 6 and beyond. In addition, the Project's most recent
training enhancement, the Train-the-Trainer Program, will further improve the training
process and increase user skill levels during full fielding of RCAS developed-
applications. Draft schedules are attached and will be incorporated into the next RCAS
Training and Documentation Plan.

The RCAS Training Plan is approved by the Reserve Component RCAS Training
Working-Level Integrated Process Team (WIPT). Members of the WIPT include

7

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

personnel representing the Army National Guard (ARNG) and the United States Army
Reserve (USAR) Chief Information Officers, the ARNG and the USAR Customer Focus
Teams, the ARNG and USAR functional proponents, and RCAS PMO Training and
Documentation staff members.

The Project does provide the required training and documentation support for RCAS
users, system administrators, and command-level representatives which the Army Test
and Evaluation Command (ATEC) evaluates during each increment's operational test
(OT). For Increment 7, the Project will field forty-nine (49) documents.

As a result of ATEC's evaluation of Increment 3 training and lessons learned at the OIS
units, training improvements were implemented as described above. During the recent
evaluation of RCAS Increment 6, ATEC rated "Training" as one of the Project's areas of
strength. At the 7 September 2001 RCAS Increment 6 Limited User Test Emerging
Results Briefing, ATEC noted in its key findings that 98% of functional users rated
training as "Very Effective" or "Effective"; 97% of functional users rated the SUM/T as
adequate; and 86% of the System Administrators and Database Administrators rated
training as "Effective". All of the functional users said they have the necessary basic
Windows skills to use the applications.

Clearly, the improved training first documented in March 1998 has been successfully
implemented and it has been further improved. Many schedules have been executed.
The intent of the ADM was met by the USAR in March 1998.

I-N. DOD IG Finding on Conclusion (Page 14):

*Business process reengineering and an analysis of alternatives would still be useful for
program increments that include new functions and should be applied at the start of each
new increment to ensure that all new functions comply with the CCA.*

NGB CIO/PEO IS Comments: Non-Concur

Consistent with DoD 5000 guidance, "new" functions have not entered the RCAS
production process after its Milestone (MS) C decision. RCAS' MS C (formerly MS III)
decision was in 1996 and authorized the Project to commence full-rate production.

8

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

II. Comments on Audit Report Recommendations

Recommendation 2:

*We recommend that the Chief, National Guard Bureau, and the Chief, Army Reserve,
review the five Section 8121(b)(2) interest items for the proposed capabilities of
Increment 6, as appropriate, and for any future increments, and determine whether the
selected solution complies with the intent of the requirements of the Clinger-Cohen Act.*

NGB CIO/PEO IS Comments: Conditionally Concur

The Chief, National Guard Bureau has reviewed the previous two RCAS Clinger-Cohen
Act compliance submissions and will continue to scrutinize the Project's future
submissions through the end of the acquisition program.

BPR and AoA were conducted during the earlier phases of system development. The
incremental reviews performed as a part of the RCAS Increments (releases) are a
validation of the earlier Milestone decisions by ensuring that the requirements are
satisfied with the parameters of the Project's baseline. RCAS General Officers' Steering
Committee (GOSC) have reviewed and approved each increment throughout the
development and fielding of the system. The Chief, National Guard Bureau chairs the
GOSC with participation by the Director, Army National Guard, Chief Army Reserve,
the DISC4 (G6) and Department of the Army, DCSOPS.

Recommendation 3a:

*We recommend that the Chief, National Guard Bureau, and the Chief, Army Reserve
require functional proponents of the Reserve Component Automation System to establish
functional performance measures to assess performance and achievement of desired
results, and continually compare new processes of outcome, output, and efficiency after
the deployment of the Reserve Component Automation System.*

NGB CIO/PEO IS Comments: Concur in principle

We agree performance measures are important to establish and, in fact, performance
measures (system and functional) established by the functional proponents do exist and
are documented in several Project documents (e.g., Acquisition Program Baseline (APB),
section 3.1.5). Beyond technical performance parameters, RCAS has administrative,
interoperability, logistics, and security performance measures. They quantitatively set
standards for hundreds of RC processes and compare the labor requirements, process
flow, task duration, and frequency of the new RCAS business processes to the pre-RCAS
business process. Additionally, the Army Reserve CIO continues to measure their IT
enterprise, which includes RCAS as part of their portfolio. The current approach

9

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

provides both functional and system performance measures and an assessment of
outcome, consistent with the Clinger-Cohen Act.

Recommendation 3b:

*We recommend that the Chief, National Guard Bureau, and the Chief, Army Reserve
reassess the risk of exchanging unencrypted files containing sensitive data between the
Reserve Component Automation System for proposed and fielded increments and other
networked systems and, if appropriate, implement encryption technology.*

NGB CIO/PEO IS Comments: Concur in principle.

As the Designating Approving Authority (DAA) for RCAS, the Director of Information
Systems for Command, Control, Communications, and Computers (DISC4), in
coordination with representatives from the Chief, National Guard Bureau and the
Program Management Office, assessed the risks of not encrypting RCAS file
transmissions during the 1999 RCAS Defense Information Technology Security
Certification and Accreditation Process (DITSCAP) and deemed the risk of potential
harm low. The Designated Approval Authority will reassess these risks in the course of
the next DITSCAP accreditation, currently scheduled for November 2002. A separate
action, outside the directed process, by the Chief, National Guard Bureau and the Chief,
Army Reserve is not required. However, we continue to keep security foremost and are
pursuing other technologies such as utilizing Virtual Private Network and incorporating
Private Key Infrastructure and Common Access Card into the infrastructure.

Recommendation 4a:

*We recommend that the Project Management Officer, Reserve Component Automation
System, develop a plan for the approval of the Chief Information Officer, Department of
the Army, that provides required training and documentation support for Reserve
Component Automation System users, system administrators, and command level
representatives.*

NGB CIO/PEO IS Comments: Non-concur.

Training has and will continue to be accomplished in accordance with existing
acquisition procedures and Army doctrine, with the involvement of personnel from the
Army Reserve Component CIOs. The Project has established a viable training plan for
each RCAS increment, which has been approved by the RCAS Training Working
Integrated Product Team (WIPT) and provides the required training and documentation
for each level of RCAS users. The Army Test and Evaluation Command (ATEC)
evaluates this documentation during each increment's Operational Test (OT). During the
recent evaluation of RCAS Increment 6, ATEC rated "Training" as one of the Project's
areas of strength. In addition, the Project's most recent training enhancement, the Train-

10

41

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

the-Trainer Program, will further improve the training process and increase user skill levels. The Project has successfully demonstrated the strength of its training program. Additional artifacts were provided to the DODIG on 21 March 2002.

Recommendation 4b:

We recommend that the Project Management Officer, Reserve Component Automation System, develop a plan for the approval of the Chief Information Officer, Department of the Army, that funds the operation and support of the Reserve Component Automation System for FYs 2002 through 2007.

NGB CIO/PEO IS Comments: Conditionally Concur.

This is guidance provided by OSD in the Milestone (MS) IIId Acquisition Decision Memorandum (ADM). The RCAS PM and Army CIO have worked jointly with the ARNG and USAR to identify critical system sustainment requirements, assess sustainment risks, develop a revised Program Office Estimate (POE), and garner required funding. In recent program budget events and with the participation of the office of the Army CIO, the Army directed over $300M to address Project shortfalls. As a result of this and the Project's affordability analysis, the Office of the Deputy Chief of Staff for Program Analysis and Evaluation declared the Project as affordable.

III. General Comments on Facts as Presented in the Audit Report

The following comments are presented to improve the document's accuracy:

Page i, Introduction – RCAS continues to have 7 increments and 7 milestones.

Page ii, Summary of Recommendations – The RCAS PMO is the Project Management Office and is led by a Project Manager – there isn't a Project Management Officer.

Page ii, Summary of Recommendations – the Reserve Components should be referred to here as the Army Reserve Component, which consists of the Army National Guard and the Army Reserve.

Page 2, RCAS is a Project, not a Program.

Page 2-3, Change to read "Beyond FY 2002, ... users *and RCAS software maintainer.*

Page 12, The updated training strategy was provided on March 8, 1998 vice March 8, 1999.

Page 16, Scope and Methodology – Compliance report was prepared by the RCAS PMO not by the Army National Guard.

11

Response to the Office of the Inspector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reserve Component Automation System (RCAS)
Project No. D2000AS-0212.001, January 23, 2002

Page 20, Department of the Army – The Program Executive Officer, Reserve Component
Automation System should be referred to as the Program Executive Office for
Information Systems.

Atch
Draft Training Schedule

12

43

Response to the Office of the Inspoector General, DoD Draft Audit Report
Clinger-Cohen Act Certification of the Reservve Component Automation System (RCAS)
Project No. D2000AS-02112.001, January 23, 2002

DRAFT 2002 TRAIN-TIHE-TRAINER SCHEDULE

DATE	APPLICATION	LOCATION
19-21 March	SOH	NG – PEC
26 March	RPAM	NG – PEC
2-4 April	SOH	BBTS
9 April	UPS/CMS	BBTS
10 April	MILPO/IDV-P	BBTS
16-18 April	SOH	NG – PEC
16-18 April	SOH	BBTS
23-25 April	SOH	NG – PEC
23-25 April	SOH	BBTS
7-9 May	SOH	ARRTC
7-9 May	SOH	BBTS
14-16 May	SOH	ARRTC
14-16 May	SOH	BBTS
21-23 May	SOH	NG – PEC
21-23 May	SOH	BBTS
29 May	UPS/CMS	BBTS
30 May	MILPO/IDV-P	MILPO/IDV-P
4-6 June	SOH	ARRTC
4-6 June	SOH	BBTS
11-13 June	SOH	NG – PEC
11-13 June	SOH	ARRTC
11 June	UPS/CMS	BBTS
12 June	MILPO/IDV-P	BBTS
25 June	UPS/CMS	BBTS
26 June	MILPO.IDV-P	BBTS

Dates for the balance of 2002 classes are in coordination.

Atch

13

Army Reserve Comments

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF, ARMY RESERVE
WASHINGTON, DC 20310-2400

REPLY TO
ATTENTION OF

DAAR-IR (36-2b)   25 Mar 02

MEMORANDUM FOR Inspector General, Department of Defense, 400 Army Navy Drive,
Arlington, VA 22202-4704

SUBJECT: Department of Defense, Inspector General (DODIG) of the Process Used to Certify
that Major Automated Information Systems are Managed in Accordance with the Clinger-Cohen
Act, Draft Report entitled *Certification of the Reserve Component Automation System*, Project
No. D2000AS-0212.001, 23 Jan 02

1. We are enclosing our Command Comments to the subject draft report.

2. If you have any questions or need additional information, please contact Mr. John Price at
(404) 464-8191 or email him at pricejoh@usarc-emh2.army.mil.

FOR THE CHIEF, ARMY RESERVE:

Encl   FRANK J. BONO
                                                  Director, Army Reserve Internal Review
                                                     and Management Control Process

DODIG Draft Report
Certification of the Reserve Component Automation System
Army Reserve Command Comments

Finding. Limitations of the Reserve Component Automation System (RCAS) Program efforts for Increments 3 and 4/5 for compliance with the intent of the Clinger-Cohen Act (CCA) were not reported by the CIO, DOD. The limitations directly affected three of the five interest items that were specified in Section 8121(b)(2). This condition occurred because the CIO did not believe that the weaknesses associated with business process reengineering and the analysis of alternatives were significant enough to withhold the CCA certification. In addition, the CIO did not identify any weakness in performance measures even though the RCAS Project Management Office and the Reserve Components had not established functional performance measures. Accordingly, Congress was not informed that the RCAS was not being developed in full compliance with CCA requirements.

Recommendations and Command Comments

Recommendation 2. We recommend that the Chief, National Guard Bureau, and the Chief, Army Reserve, review the five Section 8121(b)(2) interest items for the proposed capabilities of Increment 6, as appropriate,and for any future increments; and determine whether the selected solution complies with the intent of the requirements of the Clinger-Cohen Act.

Army Reserve Comments. Concur with the intent of the recommendation. The Army Reserve is dedicated to the principles of Clinger-Cohen, and strives to apply these principles in all aspects of IT management. Moreover, the Army Reserve manages its network and associated systems and applications as an enterprise. Thus, all actions taken to address RCAS shortfalls will be exercised enterprise-wide. In other words, those actions taken on behalf of RCAS will be the same actions taken on behalf of all Army Reserve systems.

Recommendation 3. We recommend that the Chief, National Guard Bureau, and the Chief, Army Reserve:

   a. Require functional proponents of the Reserve Component Automation System to establish functional performance measures to assess performance and achievement of desired results, and continually compare new procedures against measures of outcome, output, and efficiency after the deployment of Reserve Component Automation System.

Army Reserve Comments. Concur with the intent of the recommendation. The Reserve Component Automation System (RCAS) supports but a portion of the business processes within each of the functional areas. The remainder is supported by a myriad of Army systems, legacy applications, and individually developed products. For instance, Force Programs functionality is a large part of RCAS Release 3. Overall, however, the Total Army Authorization Document System (TAADS), the Regional Level Application Software system (RLAS), and others support Force Programs business processes, in addition to the RCAS. Measurement of RCAS operations in isolation to the others would potentially be counterproductive or misleading.

Alternatively, the Army Reserve Chief Information Office (CIO) is pursuing a more holistic means to catalog, and measure supporting information systems. Begun last year, the CIO is assembling an Information Technology (IT) portfolio, identifying all systems, applications, and supporting IT expense areas contributing to functional mission accomplishment. Once complete, this portfolio will serve as a baseline for ongoing business process review and reengineering, application and system consolidation, and performance management. As a contributor to several functional areas, RCAS is captured in the Army Reserve's IT portfolio.

   b. Reassess the risk of exchanging unencrypted files containing sensitive data between the Reserve Component Automated System for proposed and fielded increments and other networked systems and, if appropriate, implement encryption technology.

Army Reserve Comments. Concur with the intent of the recommendation. Data exchanged between the RCAS and other Army Reserve systems occurs, for the most part, within the confines of the Army Reserve's Intranet; that is, inside a secure network boundary. The likelihood of such data being compromised, or intercepted, is minimized by its residence on the Intranet. On a larger scale, however, the scenario whereby RCAS, or any other Army system, exchanges data with another system or application "in the clear" is a cause for concern.

Recent world events, coupled with Army transformation initiatives, are combining to radically alter the Army Reserve IT landscape. One outcome is likely to be a consolidation of applications, systems, and key IT services into centralized data centers. Access into and out of these data centers will be tightly controlled, likely utilizing Virtual Private Network (VPN) technology. The VPN technologies, coupled with strong domain authentication in place throughout the Army Reserve, eliminates the need for performance-robbing encryption techniques.

A timeline for migration of all applications and systems, including RCAS, into data centers has not been set. The migration has begun, however with the implementation of Active Directory, Army Knowledge Online, the Global Combat Service Support - Army, the Inspector General Network, and others. As new applications are developed, or older ones are revised, the trend is to consolidate servers, centralize operations, and thin clients. A serendipitous side effect of this is the better security that can be afforded system-to-system interfaces in a consolidated environment.

Renumbered as Recommen- dation 4.

2

Army CIO Comments

DEPARTMENT OF THE ARMY
OFFICE OF THE SECRETARY OF THE ARMY
107 ARMY PENTAGON
WASHINGTON DC 20310-0107

April 4, 2002

Office, Director of Information
Systems for Command, Control,
Communications, & Computers

MEMORANDUM FOR OFFICE OF THE INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, 400 ARMY NAVY DRIVE (ROOM 801), ARLINGTON, VA 22032-04707

SUBJECT: Audit Report on Certification of the Reserve Component Automation System (RCAS) (Project No. D2000AS-0212.001)

The purpose of this memorandum is to provide comments on selected portions of the subject draft report.

Renumbered as Recommendation 4.

Recommendation 3.b. Reassess the risk of exchanging encrypted files containing sensitive data between the Reserve Component Automated System for proposed and fielded increments and other networked systems and, if appropriate, implement encryption technology. The CIO/G-6 concurs with this recommendation. With regard to the information assurance findings cited on page 10 of the report the RCAS will again be due for re-accreditation in November 2002. The CIO/G-6 will continue to serve as the Designated Approving Authority (DAA) for the RCAS. During the required reviews, prior to certification and accreditation, the PMO and the RCAS Certification Agent will reassess the risk with respect to passing unclassified information in an unencrypted mode. A determination will be made if the data and system users are within bounds of acceptable risk. The DAA will review and determine if the earlier deferment for deploying data encryption hardware should be allowed to continue. Alternatively it maybe determined that additional measures should be put in place to reduce the risk of inadvertent disclosure of sensitive but unclassified data.

Renumbered as Recommendation 5.

Recommendation 4. b. Recommend that the Project Management Officer, Reserve Component Automation System, develop a plan for the approval of the Chief Information Officer, Department of the Army that funds the operation and support of the Reserve Component Automation System for FYs 2002 through 2007. CIO/G-6 concurs with this recommendation. With regard to the program funding findings cited on page 13 of the report the Army Programs, Analysis and Evaluation (PA&E), the RCAS Program Management Office (PMO), the National Guard Bureau (NGB), and the Office of the Chief, Army Reserve (OCAR) did work together following the Increment 4/5, Milestone IIId, review. The purpose of that effort was to resolve how to support the unfunded requirements for operation and maintenance of the RCAS infrastructure during the period FY02-07. As a result of that effort it was determined that Increment 6, Milestone IIIe, was affordable as documented in the Army PA&E memorandum dated January 21, 2002 (enclosure). Tabs A & B of the enclosed PA&E memorandum are memoranda from the OCAR and NGB that provide their commitments to support the

Printed on 🔁 Recycled Paper

48

operations and maintenance of the RCAS system. The Acquisition Decision Memorandum for Milestone IIIe, therefore, reflected the fact that the increment was ready for fielding. The Office of Secretary of Defense (OSD) Comptroller and Army Comptroller both concurred with the proposed resolution. In preparation for the Increment 6, Milestone IIIe, the Army Chief Information Officer (CIO) performed a full review of the RCAS efforts to prepare software Increment 6 for fielding, and found that there was no life cycle funding issues. Based on this review, the CIO Certification memorandum was signed by the Army CIO on February 25, 2002 and forwarded to the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence (ASD(C3I)) who is also the DoD CIO and the RCAS Milestone Decision Authority (MDA).

The Army CIO provided a concurrence signature for the Increment 6, Milestone IIIe, Acquisition Decision Memorandum (ADM) on March 14, 2002. The RCAS MDA, Mr. Stenbit, signed the Increment 6, Milestone IIIe, ADM on March 25, 2002. Mr. Stenbit's signature should close the Army and RCAS PEO action associated with resolution of the Block 4/5, Milestone IIId, unfunded requirements for FY02-07 as reflected in the Audit Report.

Questions concerning this memo should be addressed to Ms. Jacqueline Zachgo at e-mail Jacqueline.Zachgo@hqda.army.mil or by phone at (703) 614-6167.

David Borland
Deputy Chief Information Officer/G-6

Enclosure

DEPARTMENT OF THE ARMY
OFFICE OF THE DEPUTY CHIEF OF STAFF FOR PROGRAMS
700 ARMY PENTAGON
WASHINGTON, DC 20310-0700

January 21, 2002

REPLY TO
ATTENTION OF

MEMORANDUM FOR PROGRAM EXECUTIVE OFFICER, INFORMATION
SYSTEMS

SUBJECT: Affordability Assessment for the Reserve Component Automation
System (RCAS)

RCAS is an ACAT IAM program that has had Milestone IIId approved pending Clinger-Cohen Act (CCA) certification. On July 2, 2001, the ASD C3I directed the Army CIO and PM RCAS to conduct an affordability analysis in coordination with the Army National Guard and the US Army Reserve as a function of the CCA. G8, PA&E has been heavily involved in the reviews of RCAS and was a member of the Integrating Integrated Product Team Review of the program. What follows are the results of a series of reviews begun in July 2001 and completed January 9, 2002.

During the Army Program Objective Memorandum (POM) 03-07 build, funding for RCAS was increased $410.6M, or 44%, over the Future Years Defense Plan to primarily procure lifecycle replacement hardware and additional increments of software. Based upon this fact, the Army has made a commitment to ensure that RCAS remains a viable program for the Reserve Component for the foreseeable future.

This table cites the requirements profile by appropriation provided by CEAC from the Army Cost Position (ACP). It also cites the funding profile by appropriation from the BESPOM 03-07 file from the Army's PROBE database. It then compares the funding profile and the ACP.

	APPN	FY02	FY03	FY04	FY05	FY06	FY07	FY02-07
ACP Requirement	OMAR	14.4	16	23.4	22.8	24.7	26.5	
Funding BESPOM Lock		8.9	8.9	19.5	20.7	54.8	55.3	
UFR		5.5	7.1	3.9	2.1	-30.1	-28.8	-40.3
% Funded		62%	55%	83%	91%	222%	209%	
ACP Requirement	OMNG	21.5	24	23.4	22.8	24.7	26.5	
Funding BESPOM Lock		13.6	15.2	19.2	19.2	71.1	71.5	
UFR		7.9	8.8	4.2	3.6	-46.4	-45.0	-67.0
% Funded		63%	64%	82%	84%	288%	270%	
ACP Requirement	OPA	97.8	75.6	46.7	50.2	32.2	30.3	
Funding BESPOM Lock		89.3	68.6	47.1	50.4	48.8	50.9	
UFR		8.5	7.0	-0.4	-0.2	-16.6	-20.6	-
% Funded		91%	91%	101%	100%	152%	168%	
Total UFR		21.9	22.9	7.7	5.5	-93.1	-94.4	-129.6

Printed on ♻ Recycled Paper

-2-

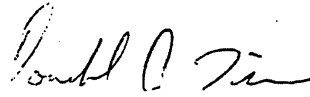SUBJECT: Affordability Assessment for the Reserve Component Automation
System (RCAS)

a. Although OMAR has a shortfall of $5.5M in FY02, the Army Reserve has
provided a written commitment (at TAB A) ensuring that shortfalls will be funded. Other
funding shortfalls will be addressed in the 04-09 POM build. In aggregate, funding
exceeds requirements by $40.3M for the OMAR appropriation.

b. In OMNG there is a shortfall of $7.9M in FY02. The National Guard Bureau
has provided a letter (at TAB B) indicating that by having the States make tradeoffs the
shortfalls can be paid. Other funding shortfalls will be addressed in the POM 04-09
build. Overall the OMNG funding exceeds requirements by $67M.

c. With the recently applied Congressional mark up of $15.5M in OPA, the UFR
in FY02 becomes a surplus of $7M. There is a $7M shortfall in FY03 that will be
addressed in the POM 04-09 build. With the Congressional mark applied funding
exceeds requirements from FY04 to 07 by $37.8M.

d. The program's overall funding exceeds requirements by $145.1M with the
mark applied.

In view of these facts, and the written commitment from the Components ensuring
this program will be successful, I view this program as affordable.

Donald C. Tison
Deputy Director, Program
Analysis and Evaluation

Enclosures

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF, ARMY RESERVE
WASHINGTON, DC 20310-2400

REPLY TO
ATTENTION OF

DAAR-PAE

1 2 DEC 2001

MEMORANDUM FOR MG Albert J. Madora, Director, Army Program Analysis and Evaluation, Washington, DC 20310 (Room 3C718)

SUBJECT: Reserve Component Automation System (RCAS) Affordability

1. The Army Reserve presented the RCAS Life Cycle Support (LCS) requirements to the II PEG during both POM 02-07 and 03-07. First priority was given to replacement of aging hardware components and second priority was operational maintenance support. POM 03-07 fully funded the replacement of hardware components in FY03, but due to Army prioritization, no OMAR funding was allocated for RCAS LCS operational and maintenance support until FY 06.

2. RCAS provides approximately 60% of the Army Reserve's IT infrastructure and backbone. Validated LCS requirements include the replacement of 4,800 obsolete workstations and aging backbone hardware. RCAS enables the Army Reserve to rapidly mobilize and is crucial for the Army Reserve's day-to-day operations.

3. Deferring hardware purchases to FY 03-07 eliminates the procurement shortfall and reduces the FY 02 funding shortfall to approximately $10.9M, of which $4.5M is the Army Reserve's price to support system operations. We have limited flexibility in FY02 to migrate funding to cover critical shortfalls. Un-resourced requirements are being compiled for consideration at the appropriation level. They will be validated, prioritized and submitted to the Chief, Army Reserve for funding decisions. We assure you that the Army Reserve will not allow the RCAS program to fail, sufficient resources will be made available to continue this critical information technology program.

FOR THE CHIEF, ARMY RESERVE:

MALCOLM B. WESTCOTT
COL, GS
Deputy Chief, Army Reserve

NGB-ARA

21 November 2001

MEMORANDUM FOR DIRECTOR, PROGRAMS ANALYSIS AND EVALUATION, WASHINGTON, DC 20310

SUBJECT: Reserve Component Automation System (RCAS) Affordability

1. The Fiscal Year (FY) 02-FY 07 POM validated and prioritized RCAS operating and support requirements. First priority was given to replacement of aging hardware components and second priorities were the operational costs and maintenance. Funding limitations prevented full funding for either replacement or O&M costs. The POM FY 03-07 fully funded replacement hardware components starting in FY 03 and the operating and support costs in FY 06 and FY 07. A backlog of hardware replacement remains for FY 00 through FY 02, but this backlog is absorbed over the course of the FY 03-07 future years defense program.

2. An un-financed requirement of approximately $10M per year for operating and support costs, predominantly hardware maintenance remains for FY 02 through FY 05. This shortfall will be funded from excess procurement as a result of the most recent Cost and Economic Analysis Center cost estimate. Therefore no additional funding is necessary for FY 03-07. Deferring hardware purchases to FY 03-07 eliminates the procurement shortfall and reduces the FY 02 funding shortfall to approximately $10.9M, $6.4M for the Army National Guard (ARNG) to support system operations. This is a relatively small amount of our total information technology maintenance program.

3. The ARNG is committed to ensuring continuation of RCAS as a viable capability in our overall IT infrastructure. In light of our current operational situation, there is a pressing need to field RCAS increment 6 software that supports mobilization. For FY 02, the ARNG has developed a funding strategy that distributes resources to the States rather than maintaining a large withhold in our headquarters. Un-financed Requirements are sent to the appropriate States to ensure that tradeoffs are made with readiness and mission accomplishment as the primary consideration. As such, we will distribute our available Director of Information Management resources and allow the States to determine prudent tradeoffs to accomplish the mission and maintain our information technology program. The ARNG is dependent on RCAS and we will ensure it continues to function.

4. Point of contact is Ms. Maureen Wylie, Division Chief, Program Analysis and Evaluation, at 703-607-2898.

FOR THE CHIEF, NATIONAL GUARD BUREAU:

MICHAEL J. SQUIER
Brigadier General, GS
Deputy Director, Army National
    Guard

Audit Team Members

The Acquisition Management Directorate, Office of the Assistant Inspector General for Auditing of the Department of Defense prepared this report. Personnel of the Office of the Inspector General of the Department of Defense who contributed to the report are listed below.

Mary Ugone
Wanda Scott
James Hutchinson
Alvin Lowe
Jerry Hall
Christine Winston
Jacqueline Pugh